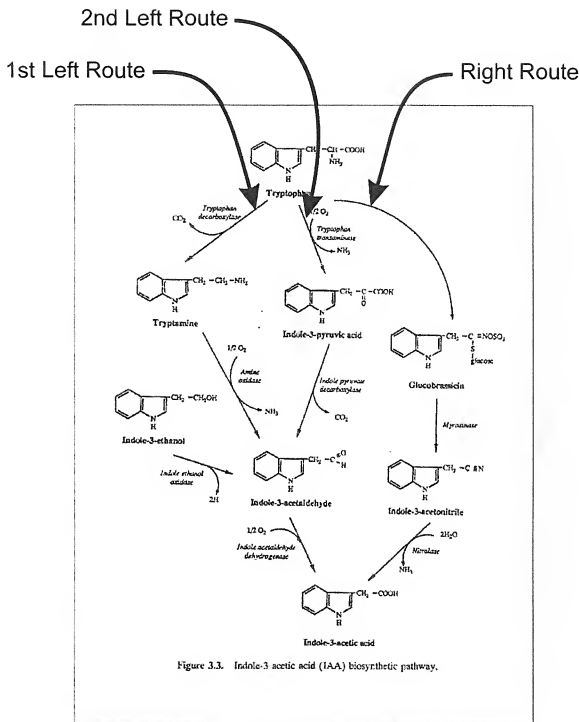


REMARKS

Claim 1 is canceled. Claims 2 – 14 are pending. Claims 13 and 14 have been withdrawn from consideration.

The Office action rejects claims 2 – 12, citing 35 U.S.C. §103(a); Bounaga (WO 01/20020 A2); Finn (Biorganic and Medicinal Chemistry Letters); and Arteca (Plant Growth Substances: Principle and Applications). As expressed in the Office action, the combination of Bounaga and Finn does not suggest the use of the enzymes employed according to the presently claimed invention. Thus, the Office action joins Arteca. The Office action errs by asserting Arteca teaches that tryptophan transaminase (i.e. tryptophan aminotransferase) and indolepyruvate decarboxylase (i.e. indole-3-pyruvate decarboxylase) are key enzymes in the pathway in which tryptophan is converted to indole acetic acid (IAA). This assertion is in error, because Arteca teaches redundant pathways. A person having ordinary skill in the art will appreciate that many metabolic processes are often redundant, meaning that if one pathway does not function, the organism will use a different pathway. Based on the cited references, a person having ordinary skill in the art had no reason to conclude bringing tryptophan aminotransferase and/or indole-3-pyruvate decarboxylase into contact with a test substance would have allowed for the identification of whether the test substance was herbicidally active, because Arteca teaches that these enzymes are not necessary for the conversion of tryptophan to IAA. Favorable reconsideration is respectfully requested.

Applicants would also like to clarify some confusing terminology that was used to refer to Figure 3.3, on page 48, of Arteca. In reply to the previous Office action, applicants stated Figure 3.3 shows indole-3-acetic acid can be synthesized from tryptophan via two routes, and the instantly targeted enzymes do not affect the right route at all. Reference to the “right route” seems to have caused confusion. Applicants meant to refer to the route that involves the compounds glucobrassicin and indole-3-acetonitrile, and none of the instantly targeted enzymes. The second route, or the “left route” includes two parts or alternatives. This terminology is illustrated in the following diagram. Applicants apologize for causing confusion.



The Director is hereby authorized to charge any deficiency in fees filed, asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in

this application by this firm) to our Deposit Account 14-1437. Please credit any excess fees to such account.

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Respectfully submitted,
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A handwritten signature in black ink, reading "Michael P. Byrne". The signature is written in a cursive, flowing style.

Michael P. Byrne
Registration No. 54,015